

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) A light emitting apparatus ~~equipped with~~ comprising a light emitting device ~~which has~~ comprising:

an anode over a substrate having an insulation surface; [[,]]

[[a]] an EL layer which includes an organic compound which is in contact with the anode; and [[,]]

a cathode which is in contact with the EL layer including the organic compound,
[[and]] wherein the EL layer includes an organic compound in which electro luminescence is obtained, and

~~the light emitting apparatus characterized in that, in said layer including the organic compound, included is silicon~~ wherein the EL layer includes silicon, with 1×10^{18} - 5×10^{20} pieces/cm⁻³ [[,]] by SIMS measurement.

2-26. (Canceled)

27. (New) The light emitting apparatus according to claim 1,
wherein the silicon is included as SiH_x, and
wherein the numeral x is a natural number.

28. (New) The light emitting apparatus according to claim 1,
wherein the silicon is included as SiO_x, and
wherein the numeral x is a natural number.

29. (New) The light emitting apparatus according to claim 1, wherein the electro luminescence is fluorescence.

30. (New) The light emitting apparatus according to claim 1, wherein the organic compound is one selected from the group consisted of 4,4'-bis-[N-(naphthyl)-N-phenyl-amino]biphenyl, basocuproine, 4,4',4''-tris(N-3-methylphenyl-N-phenyl-amino) triphenyl amine, and tris-8-quinolinoaluminum complex.

31. (New) The light emitting apparatus according to claim 1, further comprising a thin film transistor over the substrate and electrically connected to the anode.

32. (New) A light emitting apparatus comprising a light emitting device comprising:
an anode over a substrate having an insulation surface,
an EL layer which is in contact with the anode; and
a cathode which is in contact with the EL layer,
wherein the EL layer includes a host material and a dopant material,
wherein the dopant material is an organic compound in which electro luminescence is obtained, and

wherein the EL layer includes silicon, with 1×10^{18} - 5×10^{20} pieces/cm³ by SIMS measurement.

33. (New) The light emitting apparatus according to claim 32,
wherein the silicon is included as SiH_x, and
wherein the numeral x is a natural number.

34. (New) The light emitting apparatus according to claim 32,
wherein the silicon is included as SiO_x, and
wherein the numeral x is a natural number.

35. (New) The light emitting apparatus according to claim 32, wherein the electro luminescence is fluorescence.

36. (New) The light emitting apparatus according to claim 32, wherein the organic compound is one selected from the group consisted of 4,4'-bis-[N-(naphthyl)-N-phenyl-amino]biphenyl, basocuproine, 4,4',4"-tris(N-3-methylphenyl-N-phenyl-amino) triphenyl amine, and tris-8-quinolinoaluminum complex.

37. (New) The light emitting apparatus according to claim 32, further comprising a thin film transistor over the substrate, electrically connected to the anode.

38. (New) A light emitting apparatus comprising a light emitting device comprising:
an anode over a substrate having an insulation surface,
an EL layer which is in contact with the anode; and
a cathode which is in contact with the EL layer,
wherein the EL layer comprises:
a hole injection layer in contact with the anode;
a light emitting layer over the hole injection layer including an organic compound in which electro luminescence is obtained; and
an electron injection layer over the light emitting layer, and
wherein the light emitting layer includes silicon, with 1×10^{18} - 5×10^{20} pieces/cm³ by SIMS measurement.

39. (New) The light emitting apparatus according to claim 38,
wherein the silicon is included as SiH_x, and
wherein the numeral x is a natural number.

40. (New) The light emitting apparatus according to claim 38,
wherein the silicon is included as SiO_x , and
wherein the numeral x is a natural number.

41. (New) The light emitting apparatus according to claim 38, wherein the electro
luminescence is fluorescence.

42. (New) The light emitting apparatus according to claim 38, wherein the organic
compound is one selected from the group consisted of 4,4'-bis-[N-(naphthyl)-N-phenyl-
amino]biphenyl, basocuproine, 4,4',4''-tris(N-3-methylphenyl-N-phenyl-amino) triphenyl amine,
and tris-8-quinolinoaluminum complex.

43. (New) The light emitting apparatus according to claim 38, further comprising a thin
film transistor over the substrate, electrically connected to the anode.

44. (New) A light emitting apparatus comprising a light emitting device comprising:
an anode over a substrate having an insulation surface,
an EL layer which is in contact with the anode; and
a cathode which is in contact with the EL layer,
wherein the EL layer comprises:

- a hole injection layer in contact with the anode;
- a hole transport layer over the hole injection layer;
- a light emitting layer over the hole transport layer, including an organic
compound in which electro luminescence is obtained;
- a electron transport layer over the light emitting layer; and
- an electron injection layer over the electron transport layer, and

wherein the light emitting layer includes silicon, with 1×10^{18} - 5×10^{20} pieces/ cm^3 by SIMS
measurement.

45. (New) The light emitting apparatus according to claim 44, wherein the silicon is included as SiH_x , and wherein the numeral x is a natural number.

46. (New) The light emitting apparatus according to claim 44, wherein the silicon is included as SiO_x , and wherein the numeral x is a natural number.

47. (New) The light emitting apparatus according to claim 44, wherein the electro luminescence is fluorescence.

48. (New) The light emitting apparatus according to claim 44, wherein the organic compound is one selected from the group consisted of 4,4'-bis-[N-(naphthyl)-N-phenyl-amino]biphenyl, basocuproine, 4,4',4"-tris(N-3-methylphenyl-N-phenyl-amino) triphenyl amine, and tris-8-quinolinoaluminum complex.

49. (New) The light emitting apparatus according to claim 44, further comprising a thin film transistor over the substrate, electrically connected to the anode.

50. (New) A light emitting apparatus comprising a light emitting device comprising:
an anode over a substrate having an insulation surface,
an EL layer which is in contact with the anode; and
a cathode which is in contact with the EL layer,
wherein the EL layer comprises:

a first functional region over the anode, including a first compound; and

a second functional region in contact with the first functional region, including a second organic compound in which electro luminescence is obtained, and

a mixed region between the first functional region and the second functional region, including the first compound and the second organic compound,
wherein the mixed region includes silicon, with 1×10^{18} - 5×10^{20} pieces/cm³ by SIMS measurement.

51. (New) The light emitting apparatus according to claim 50,
wherein the silicon is included as SiH_x, and
wherein the numeral x is a natural number.

52. (New) The light emitting apparatus according to claim 50,
wherein the silicon is included as SiO_x, and
wherein the numeral x is a natural number.

53. (New) The light emitting apparatus according to claim 50, wherein the electro luminescence is fluorescence.

54. (New) The light emitting apparatus according to claim 50, wherein the organic compound is one selected from the group consisted of 4,4'-bis-[N-(naphthyl)-N-phenyl-amino]biphenyl, basocuproine, 4,4',4''-tris(N-3-methylphenyl-N-phenyl-amino) triphenyl amine, and tris-8-quinolinoaluminum complex.

55. (New) The light emitting apparatus according to claim 50, further comprising a thin film transistor over the substrate, electrically connected to the anode.